



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,013	10/21/2003	Hiroyuki Sakamoto	9281-4682	4818

7590 03/18/2005
Brinks Hofer Gilson & Lione
P.O. Box 10395
Chicago, IL 60610

EXAMINER DICKEY, THOMAS L	
ART UNIT 2826	PAPER NUMBER

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/690,013	SAKAMOTO ET AL.	
	Examiner	Art Unit	
	Thomas L. Dickey	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/21/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2826

DETAILED ACTION

1. The preliminary amendment filed on 10/21/2003 has been entered.

Oath/Declaration

2. The oath/declaration filed on 10/21/2003 is acceptable.

Drawings

3. The formal drawings filed on 10/21/2003 are acceptable.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

5. The Information Disclosure Statement filed on 10/21/2003 has been considered.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

Art Unit: 2826

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3,5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by YAMAURA ET AL. (2002/0089052).

With regard to claims 1 and 3 Yamaura et al. discloses a circuit device comprising a semiconductor chip 2 mounted on a substrate 4; and a sealing layer 6 for sealing the semiconductor chip 2 so as to cover the semiconductor chip 2, wherein the sealing layer 6 comprises a silicone-based material (resin A, note paragraph 0071 and figure 5), wherein an elastic coefficient of the silicone-based material (resin A) is within a range from 2 to 4 MPa, said range lying completely inside of applicant's claimed range of from 1 to 50 MPa. Note figures 1a, 1b, 2a, 2b, 5 and 8 and paragraphs 0058-0060,0067, and 0071 of Yamaura et al.

With regard to claims 5 and 7 Yamaura et al. discloses a method for making a circuit device comprising mounting a semiconductor chip 2 on a substrate 4; and forming a sealing layer 6 so as to cover the semiconductor chip 2, wherein the sealing layer 6 comprises a silicone-based material (resin A, note paragraph 0071 and figure 5), wherein an elastic coefficient of the silicone-based material (resin A) is within a range from 2 to 4 MPa, said range lying completely inside of applicant's claimed range of from 1 to 50 MPa. Note figures 1a, 1b, 2a, 2b, 5 and 8 and paragraphs 0058-0060,0067, and 0071 of Yamaura et al.

Claims 1,2,4-6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by EGUCHI ET AL. (2002/0031672).

Art Unit: 2826

With regard to claims 1, 2, and 4 Eguchi et al. discloses a circuit device comprising a semiconductor chip 4 mounted on a substrate 1; a sealing layer 18 for sealing the semiconductor chip 4 so as to cover the semiconductor chip 4, a shielding member 7-11 arranged on the substrate 1 so as to cover the sealing layer 18 on the substrate 1, wherein the shielding member 7-11 and the substrate 1 are soldered to each other; and wherein the sealing layer 18 comprises a silicone-based material (silicone gel) having a thixotropic index of 3.6, which is from 2 to 6. Note figure 3, paragraphs 0001-0004, and paragraphs 0007-0009 of Eguchi et al.

With regard to claims 5, 6, and 8 Eguchi et al. discloses a method for making a circuit device comprising mounting a semiconductor chip 4 on a substrate 1; and forming a sealing layer 18 so as to cover the semiconductor chip 4, wherein the sealing layer 18 comprises silicone-based material (silicone gel) having a thixotropic index of 3.6, which is from 2 to 6, and the circuit device comprises a shielding member 7-11 arranged on the substrate 1 so as to cover the sealing layer 18 on the substrate 1, and the method further comprises soldering the shielding member 7-11 and the substrate 1 to each other. Note figure 3, paragraphs 0001-0004, and paragraphs 0007-0009 of Eguchi et al.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas L Dickey whose telephone number is 571-272-1913. The examiner can normally be reached on Monday-Thursday 8-6.

Art Unit: 2826

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thomas L. Dickey', is positioned above the printed name.

Thomas L. Dickey
Patent Examiner
Art Unit 2826
12/04